



Project Health & Safety Plan [HASP]

TechLaw, Inc.



Project/Site Name: WV Chemical Leak Site Address: 1015 Barlow Drive, Charleston, WV 25311
03049.0.001.134.01.RS.A3XK
Project Number: TL01-14-01-001 Project Manager: Ex. 4 - CBI Phone: Ex. 4 - CBI

HEALTH and SAFETY PLAN

WV Chemical Leak
Charleston, WV
03049.0.001.134.01.RS.A3XK
1/18/2014

Project Safety Plan Written By	Ex. 4 - CBI	Environmental Scientist	1/18/14
	Name	Title	Date
Project Manager Approval	Ex. 4 - CBI	Project Manager	1/21/14
	Name	Title	Date
H&S Review Concurrence*			
	Name	Title	Date

*Approval must be given by the H&S Director, or any TechLaw Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP), or their chosen designee.



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1. Scope of Work	
Dates of the work:	1/10/14 – 6/30/14 (TDD end date)
Scope of work: (Type of activity, expected tasks, methods/procedures, order of events, etc.)	Assist the EPA OSC in Emergency and Removal Assessment work at the Freedom Industries Facility in Charleston, WV. Provide Technical Support in evaluation of the chemical spill. Provide air, water, and soil sampling support as needed. Assist with documentation, both written and photographic.
Agency Involved (regulations): Site Regulatory Status: (i.e. 1910, 1926 or State) Governing Agency: (i.e. EPA, DOE, State, USACE, NPL Site, NRC, Air Force, OSHA, etc.)	EPA; START; WVDEP; Chemical Safety Board; USCG; Attorney General; National Guard; WVDHHR.
Identify site contaminants: (If present, how was it determined that exposures will be below OSHA PEL or NIOSH RELs?) Please provide exposure limits if available. If none are known, site sources used to arrive at this conclusion. Please provide OSHA or MSDS information for all contaminants	Crude MCHM 4-methyl-1-cyclohexanemethanol Dimethyl 1,4-cyclohexanedicarboxylate Methanol 1,4-Cyclohexanedimethanol Liquid Calcium chloride Glycerine PPH, stripped DOWANOL™ PPH Glycol Ether DOWANOL™ DiPPH Glycol Ether See attached MSDS for each



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Site description:

(Physical details, i.e., acreage, topography, vegetation, type of facility, usage history, distance from pop. center, access routes, etc.)

A state of emergency was declared for nine counties in West Virginia (Boone, Cabell, Clay, Jackson, Kanawha, Lincoln, Putnam, and Roane) due to a chemical spill at the Freedom Industries Facility in Charleston, WV. The spill leaked crude MCHM and PPH, which made its way into the Elk River approximately 1.5 miles upstream from the WV American Water Company surface water intake. A "do not use water" order was placed in effect for customers of the WV American Water Company. The order reportedly affected approximately 300,000 persons.

The Site consists of the Freedom Industries Facility located at the former Etowah River Terminal in Etowah, Kanawha County, West Virginia, and the affected areas of the Elk River. The Site consists of one breached tank which contained MCHM, the potential chemicals and MCHM-contaminated soils beneath the tank, the soils along the pathway to the Elk River, and the affected portions of the Elk River. Due to a breach in the tank and failure of the secondary containment around the tank, the chemical reached the soil and river.

The parameters of the Site are continuing to change as the extent of the leak becomes more defined.



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2. Task Hazard Analysis (What are the major hazards associated with each definable task within the scope of work?) pg ____ of ____ (as needed)

If hazards include work over water, extreme temperatures, remote locations, confined space, respirator use or any other high risk/logistically challenging elements use a HASP template for planning.

Please contact TechLaw Health & Safety for Assistance and Guidance for Templates, Forms and SOPs (that are posted on SharePoint).

Task: Mobilization	Hazard(s): Sprains and Strains; Tiredness; awareness	Mitigation/Hazard Controls: Use proper lifting techniques when loading equipment. Use mechanical assistance when possible. Team lift heavy equipment and supplies. Travel when well rested. Be aware of the road conditions and the other drivers on the road. Be aware of ice and snow on roadways. Required PPE: n/a
Task: Air Sampling	Hazard(s): Slip, Trip, and Fall; Flora and Fauna; Equipment operators; Cold Stress	Mitigation/Hazard Controls: Be aware of the surroundings. Watch for uneven terrain when walking the site. Be aware of ice and snow which would make for treacherous footing on site. Mark any areas that may present the potential for slips, trips, and falls. Dress appropriately for the weather. Dress in layers to accommodate the change in temperature between indoor activities and outdoor activities. Have rain and snow gear available for use if the conditions arise. Be aware of insect and plant life around the site and watch for poisonous or toxic plants or insects. Be aware of wildlife and avoid contact with wildlife. Make eye contact with any heavy equipment operators and remain in their line of site when moving around the site. Mark any sampling areas and be aware of work on the site around the sampling activities. Required PPE: Modified Level D – Hard hat, safety glasses, safety vests, steel toe boots, long sleeves, long pants, chemically resistant gloves
Task: Water Sampling	Hazard(s): Slip, Trip, and Fall; Flora and Fauna; Equipment operators; Cold Stress	Mitigation/Hazard Controls: Be aware of the surroundings. Watch for uneven terrain when walking the site. Be aware of ice and snow which would make for treacherous footing on site. Mark any areas that may present the potential for slips, trips, and falls. Dress appropriately for the weather. Dress in layers to accommodate the change in temperature between indoor activities and outdoor activities. Have rain and snow gear available for use if the conditions arise. Be aware of insect and plant life around the site and watch for poisonous or toxic plants or insects. Be aware of wildlife and avoid contact with wildlife. Make eye contact with any heavy equipment operators and remain in their line of site when moving around the site. Mark any sampling areas and be aware of work on the site around the sampling activities.



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		Required PPE: Modified Level D – Hard hat, safety glasses, safety vests, steel toe boots, long sleeves, long pants, chemically resistant gloves
Task: Soil Sampling	Hazard(s): Slip, Trip, and Fall; Flora and Fauna; Equipment operators; Cold Stress	Mitigation/Hazard Controls: Be aware of the surroundings. Watch for uneven terrain when walking the site. Be aware of ice and snow which would make for treacherous footing on site. Mark any areas that may present the potential for slips, trips, and falls. Dress appropriately for the weather. Dress in layers to accommodate the change in temperature between indoor activities and outdoor activities. Have rain and snow gear available for use if the conditions arise. Be aware of insect and plant life around the site and watch for poisonous or toxic plants or insects. Be aware of wildlife and avoid contact with wildlife. Make eye contact with any heavy equipment operators and remain in their line of site when moving around the site. Mark any sampling areas and be aware of work on the site around the sampling activities. Required PPE: Modified Level D – Hard hat, safety glasses, safety vests, steel toe boots, long sleeves, long pants, chemically resistant gloves
Task: Documentation	Hazard(s): Slip, Trip, and Fall; Biological; Flora and Fauna; Equipment operators; Cold Stress	Mitigation/Hazard Controls: Be aware of the surroundings. Watch for uneven terrain when walking the site. Be aware of ice and snow which would make for treacherous footing on site. Mark any areas that may present the potential for slips, trips, and falls. Dress appropriately for the weather. Dress in layers to accommodate the change in temperature between indoor activities and outdoor activities. Have rain and snow gear available for use if the conditions arise. Be aware of insect and plant life around the site and watch for poisonous or toxic plants or insects. Be aware of wildlife and avoid contact with wildlife. Use hand sanitizer and proper hand washing techniques to avoid cold and flu germs. Make eye contact with any heavy equipment operators and remain in their line of site when moving around the site. Required PPE: Level D – Hard hat, safety glasses, safety vests, steel toe boots, long sleeves, long pants



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3. Emergency Contacts			
Fire	911	Non-emergency: (304) 348-8137	
Police	911	Non-emergency: (304) 348-6801	
Medical	911	Non-emergency: (304) 345-2312	
Client Contact: Dennis Matlock	Office #: (304) 234-0284	Cell #: (304) 280-7500	
EMERGENCY Nearest Hospital	Name: Charleston Area Medical Center	Phone #: (304) 388-5432	
Address & Directions to Nearest Hospital (Map Attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO)	Address: 501 Morris Street Charleston, WV 25301	Directions: See Attached Map	
NON-EMERGENCY Nearest Occupational Health Clinic	Name: MedExpress Urgent Care - Charleston	Phone #: (304) 925-3627	
Address & Directions to Nearest Occ. Health Clinic (Map Attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO)	Address: 5430 Maccorkle Ave SE Charleston, WV 25304	Directions: See Attached Map	
Responsible Personnel			
Project Manager	Ex. 4 - CBI	Office #: Ex. 4 - CBI	Cell #: Ex. 4 - CBI
Site Safety Officer	Lead START on-site (varies)	Office #: (varies)	Cell #: (varies)
TechLaw Health and Safety Director	Ex. 4 - CBI ScD, CIH	Office #: Ex. 4 - CBI	Cell #: Ex. 4 - CBI
TechLaw Health and Safety Officer		Home #: Ex. 4 - CBI	Cell #: Ex. 4 - CBI



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TechLaw Medical Consultant	<div>Ex. 4 - CBI</div> M.D.	Office #: <div>Ex. 4 - CBI</div>	PM #: <div>Ex. 4 - CBI</div>
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4. List Applicable TechLaw SOPs		
02-03-04 Field Procedures - Equipment Decontamination	03-01-04 Field Documentation –Maintaining a Field Logbook	04-01-02 Packaging and Shipping - Preservatives
02-05-04 Field Procedures - Chain-of-Custody	03-02-05 Field Documentation Procedures - Taking and Documenting Photographs	04-02-02 Packaging and Shipping Procedures – Environmental Samples
02-06-06 Field Procedures - Analytical Support and Laboratory Selection	03-04-04 Field Documentation Procedures – Field Oversight	05-03-02 Field Equipment Operation and Maintenance Procedures - Organic Vapor Analyzers
07-08-01 Soil/Sediment Sampling and Analysis Procedures - Sampling for Volatile Organic Compounds	08-02-03 Standard Operating Procedures - Surface Water Sampling and Analysis Procedures	05-07-01 Field Equipment Operation and Maintenance Procedures - Photoionization Gas Analyzers
09-03-04 Health and Safety Procedures - Personal Protective Equipment	09-05-03 Health and Safety Guidelines - Cold Stress Control	09-07-04 Health and Safety Procedures - Communications
09-12-01 Health and Safety Procedures – Hazard Communications Program		

5. TechLaw Field Team Members and Required Training for this Project		
Team Member Name(s)	Training/Qualifications	Signature of Team Member
William Huggins	OSHA HazWoper, First Aid/CPR, Bloodborne Pathogens	
Michelle Dallessandro	OSHA HazWoper, First Aid/CPR, Bloodborne Pathogens	



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Ex. 4 - CBI		OSHA HazWoper, First Aid/CPR, Bloodborne Pathogens
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6. Site Specific Equipment: (equipment not conventionally used for field work, or is unfamiliar to the assigned team members)	
Item:	Hazard(s):
	Mitigation/Hazard Controls:
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	Mitigation/Hazard Controls:
Item:	Hazard(s):
	Mitigation/Hazard Controls:

Health & Safety Plan Checklist. Checklist is not part of HASP – Do not take off-site or bring to Project Site. Initially the checklist will be posted with the HASP on SharePoint.

Include Site Map, Directions to Site and Map of planned route to site.

Emergency Response Information – Directions to Site, Directions to Hospital

Contaminants of Concern – Attach MSDSs of appropriate Contaminants

July 2011